

Abstract of the Disclosure

The present invention includes a group of novel compounds that are demonstrated to potently and selectively inhibit HIV integrase (IN) activity *in vitro* and to potently inhibit HIV replication in live, cultured cells at non-toxic concentrations. The novel compounds disclosed include 2,3-di(3,4-dihydroxy-dihydroxydihydrocinnamoyl)-L-tartaric acid, 2,3-di-(3,4-dihydroxybenzoyl)-L-tartaric acid, 2,3-di-(3,4-dihydroxyphenylacetyl)-L-tartaric acid, 2,3-di-(3,4,5-trihydroxybenzoyl)-L-tartaric acid, 2,3-dicaffeoyldiamidopropionic acid, 1,2,-dicaffeoyl-L-glyceric acid, bis,-3,4-dicaffeoyldiamidobenzoic acid, di-3,4-dihydroxybenzylidene succinic acid, di-3,4-dihydroxybenzylidene succinic acid, 2,3-dicaffeoyl-L-serine, bis-dicaffeoyl-L-isoserine and 1,4-dicaffeoyl-L-lysine. Tests of integrase inhibitors with 2',3'-dideoxycytidine, zidovudine and nelfinavir (protease inhibitor) indicated a potent synergy against reverse transcriptase inhibitor resistant virus. The potential benefit from the addition of integrase inhibitors to combination drug therapies is significant.